

<b>Notice of Allowability</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	09/744,746	FUJIMOTO ET AL.	
	Examiner	Art Unit	
	Cheukfan Lee	2622	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1.  This communication is responsive to an amendment filed March 2, 2005.
2.  The allowed claim(s) is/are 1-3 and 6-16, now renumbered 1-14, respectively.
3.  The drawings filed on January 29, 2001 are accepted by the Examiner.
4.  Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)  All    b)  Some\*    c)  None    of the:

1.  Certified copies of the priority documents have been received.
2.  Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3.  Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.  
**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

5.  A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
6.  CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.
  - (a)  including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached
    - 1)  hereto or 2)  to Paper No./Mail Date \_\_\_\_\_.
  - (b)  including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7.  DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

1.  Notice of References Cited (PTO-892)
2.  Notice of Draftsperson's Patent Drawing Review (PTO-948)
3.  Information Disclosure Statements (PTO-1449 or PTO/SB/08),  
Paper No./Mail Date \_\_\_\_\_
4.  Examiner's Comment Regarding Requirement for Deposit  
of Biological Material
5.  Notice of Informal Patent Application (PTO-152)
6.  Interview Summary (PTO-413),  
Paper No./Mail Date \_\_\_\_\_
7.  Examiner's Amendment/Comment
8.  Examiner's Statement of Reasons for Allowance
9.  Other \_\_\_\_\_.



1. All pending claims 1-3 and 6-16 are allowed. Claims 15 and 16 are newly added.  
Claims 1, 14 and 16 are independent.

2. The following is an examiner's statement of reasons for allowance:

Claim 1 as amended includes subject matter of now canceled claim 4, which was indicated allowable in the previous Office Action mailed October 4, 2004. The reason for allowance for claim 4 was given in the previous Office Action. Claim 4 depended on claims 2 and 3, both still pending. The reason for allowance was that none of the prior art of record, including Fujimoto et al. (PCT Publication Number WO98/05158 in Japanese, corresponding to U.S. Patent No. 6,222,581) and Onishi et al. (U.S. Patent No. 6,469,808), teaches in addition to the connector being attached to a longitudinal center portion in the second edge portion of the substrate, the specific wiring features claimed (in claim 4).

Thought the amended claim 1 is not an exact version of claim 4 rewritten in independent form to include all limitations of old claims 1, 2 and 3 upon which claim 4 depended directly or indirectly, the key features that made claim 4 allowable over the prior art were 1) the connector and its mounting or attaching position on the substrate and 2) the specific wiring features in claim 4. Both the connector and the specific wiring features are included in the amended claim 1, with the connector attached to a longitudinal center portion of an elongated edge of the substrate, which elongated edge substitutes the "second edge portion" of old claims 2, 3 and 4.

Thus, main features indicated in the reasons for allowance are included in the amended claim 1, and the reason for allowance for claim 1 are similar to that given for claim 4 (now canceled), which reason is modified and given below.

Claim 1 is allowable over the prior art of record including Fujimoto et al. and Onishi et al. identified above does not teach, in addition to the connector being attached to the longitudinal center portion of an elongated edge of the substrate defined in claim 1, the specific wiring features of claim 1.

Claims 2, 3 and 6-13 depending upon claim 1 are allowable for the reason given for claim 1.

Independent claim 14 has been amended similarly to claim 1. Claim 14 includes the specific wiring features in addition to the connector and its mounting position relative to the substrate. Thus, claim 14 is allowable for the same reason as given for claim 1.

Independent claim 15 is claim 9 rewritten in independent form. Reason for allowance for claim 9 given in the previous Office Action mailed October 4, 2004 is modified for claim 15 and repeated below.

Claim 15 is allowable because the closest prior art identified above (in the discussion for claim 1) does not teach the claimed details on who the electrode pads are disposed relative to the row of the light receiving elements and relative to the two

longitudinal edge portions (of the second edge portion) provided with a plurality of signal pads for signal input and output, as claimed in claim 15.

Claim 16 depending on claim 15 is allowable for the reason given for claim 15.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

3. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Cheukfan Lee whose telephone number is (571) 272-7407. The examiner can normally be reached on 9:30 a.m. to 6:00 p.m., Mon-Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward L. Coles can be reached on (571) 272-7402. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Cheukfan Lee  
April 27, 2005



A handwritten signature in black ink, appearing to read "Cheukfan Lee". The signature is fluid and cursive, with the name written in a single continuous line.